

1 What is claimed is:

2 1. A method of testing a video display device at a remote site using internally
3 generated test patterns , said method comprises:

4 receiving a request for service on a video display device from an end user at a
5 remote site;

6 providing an access code to the end user at the remote site to initiate a video
7 display test on the video display device using information stored inside the video display
8 device;

9 receiving reports from the end user at the remote site; and
10 diagnosing on a functionality of the video display device based on the reports
11 received from the end user.

12 2. The method of claim 1, wherein the video display device is connected to a system,
13 further comprising:

14 initiating a diagnostic procedure for detecting malfunction occurred outside the
15 video display device.

16 3. A method for testing a video display device using internally generated test
17 patterns, the method comprising:

18 contacting a service center to obtain a test code,
19 entering the test code from a keypad on a video display device to initiate a visual
20 test that displays a plurality of video display test patterns on a video display screen using
21 information stored inside the video display device;

22 examining each video display test pattern to generate an evaluation;
23 reporting the evaluation to the service center; and
24 receiving a diagnosis from the service center.

25 4. The method of claim 3, further comprising:

26 adjusting the video display device based on the diagnosis.

27 5. The method of claim 3, wherein the video display device is connected to a system,
28 further comprising

29 executing a diagnostic procedure to locate a malfunctioned component in the
30 system.

31 6. A self-testing video display device, comprising:

32 a keypad;

33 a video display screen;

34 a memory that stores information for a video display test program;

1 a processor that extracts the information for video display test program from the
2 memory, converts the information into video display test signals, and executes the video
3 display test program;
4 a controller that sends the video display test signals in a proper format to the video
5 display screen.

6 7. The self-testing video display device according to claim 6, further comprising an
7 application specific integrated circuit (ASIC), wherein the memory, processor and
8 controller are located on the ASIC.

9 8. The self-testing video display device according to claim 7, further comprising a
10 video processing unit, wherein the ASIC and the connector are located in the video
11 processing unit.

12 9. The self-testing video display device according to claim 6, wherein the
13 keypad is located on a surface of the video display device.

14 10. The self-testing video display device according to claim 6, further comprising a
15 connector that delivers an input signal to the processor.

16 11. The self-testing video display device according to claim 6, wherein the memory is
17 chosen from a list consisting of ROM, DRAM, SRAM, and VRAM.

18 12. The self-testing video display device according to claim 6, wherein the
19 information for the video display test program comprises test pattern information and
20 instructions for executing the video display test program.

21 13. The self-testing video display device according to claim 12, wherein the
22 information for the video display test program further comprises information for a
23 diagnostic procedure.

24 14. The self-testing video display device according to claim 6, wherein the video
25 display screen is a liquid crystal display screen, an organic light emitting display screen, a
26 fluorescent display screen, or a plasma display screen.